

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/833,769	YUKITAKE ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Richard Lee	2613	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed August 12, 2005.
2. ☒ The allowed claim(s) is/are 1,2 and 4-12.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☒ Certified copies of the priority documents have been received in Application No. 07/970,046.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

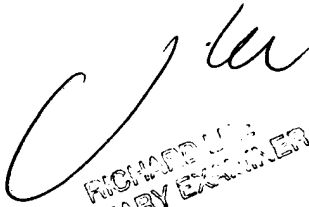
**Attachment(s)**

- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br/>Paper No./Mail Date _____</li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</li> <li>6. <input type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date _____</li> <li>7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____</li> </ol> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Art Unit: 2613

1. The applicants are informed that a typographical error exists in the original U.S. Patent 5,745,182. Specifically, Patent No. "4,864,294" as identified for the Gillard reference on the front page of U.S. Patent 5,745,182 should be Patent No. "4,864,394" instead. The Examiner has indicated the correction to be made as shown in the attachment. No further action is required by the applicants.

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Lee whose telephone number is (571) 272-7333. The Examiner can normally be reached on Monday to Friday from 8:00 a.m. to 5:30 p.m, with alternate Fridays off.

  
RICHARD LEE  
PRIMARY EXAMINER

Richard Lee/rl



11/3/05



US005745182A

# United States Patent [19]

Yukitake et al.

[11] Patent Number: 5,745,182  
[45] Date of Patent: Apr. 28, 1998

[54] METHOD FOR DETERMINING MOTION COMPENSATION

0395440A2 10/1990 European Pat. Off. .  
0447068A2 9/1991 European Pat. Off. .  
0484140A2 5/1992 European Pat. Off. .

[75] Inventors: Takeshi Yukitake; Shuji Inoue, both of Yokohama, Japan

## OTHER PUBLICATIONS

[73] Assignee: Matsushita Electric Industrial Co., Ltd., Osaka, Japan

A. Puri, et al, "Video Coding with Motion-Compensated Interpolation for CD-ROM Applications", Signal Processing, Image Communication, vol. 2, No. 2, pp. 127-144, Aug. 1990.

[21] Appl. No.: 278,010

K. Kinuhata, et al, "Universal Digital TV Codec —Unico-dec", 7th International Conference on Digital Satellite Communications, May 1986, pp. 281-288.

[22] Filed: Jul. 20, 1994

## Related U.S. Application Data

[62] Division of Ser. No. 970,046, Nov. 2, 1992, Pat. No. 5,369,449.

(List continued on next page.)

## [30] Foreign Application Priority Data

Nov. 8, 1991 [JP] Japan ..... 3-293004  
Jul. 9, 1992 [JP] Japan ..... 4-181980

Primary Examiner—Richard Lee

Attorney, Agent, or Firm—Watson Cole Stevens Davis, P.L.L.C.

[51] Int. Cl.<sup>6</sup> ..... H04N 7/32  
[52] U.S. Cl. .... 348/416; 348/699  
[58] Field of Search ..... 348/413, 416, 348/699, 400-402, 407, 409-412, 384, 390, 415; 382/232, 236, 238; H04N 7/137

## [57] ABSTRACT

A method for predicting motion compensation for determining of an input image based on a motion vector of the input image from this input image to a reference image which has been sampled at a first set time, and the method includes calculating a motion vector of the input image based on a move, at a second set time, of a block unit which is a part of the input image and consists of a plurality of pixels, and calculating a motion vector of the reference image based on a move, at the first set time, of a block unit which is a part of the reference image and consists of a plurality of pixels. Move compensation of the input image is calculated both from the motion vector of the input image and from the motion vector of the reference image, to thereby realize a method for determining motion compensation with high precision.

## [56] References Cited

### U.S. PATENT DOCUMENTS

4,691,230 9/1987 Kaneko et al. .... 348/699  
4,862,266 8/1989 Gillard ..... 348/699  
4,864,294 9/1989 Gillard .  
4,989,089 1/1991 Chantelou et al. .

(List continued on next page.)

### FOREIGN PATENT DOCUMENTS

0395271A2 10/1990 European Pat. Off. .

3 Claims, 6 Drawing Sheets

